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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
09/955,656	09/18/2001	Charles A. Nicolette	GZ 2096.00	1157		
30089	7590 06/04/2004	EXAMINER				
GENZYME CORPORATION C/O BINGHAM MCCUTCHEN BINGHAM MCCUTCHEN, LLP			MYERS, CARLA J			
	SAN FRANCISCO, CA 94111			PAPER NUMBER		
			1634	1634		
			DATE MAILED: 06/04/2004			

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No	•	Applicant(s)			
1		09/955,656		NICOLETTE ET AL.			
	Office Action Summary	Examiner		Art Unit			
		Carla Myers		1634			
Period fo	The MAILING DATE of this communication reply	on appears on the cove	r sheet with the c	orrespondence ad	Idress		
THE   - External after   - If the   - If NO   - Failu   Any	ORTENED STATUTORY PERIOD FOR I MAILING DATE OF THIS COMMUNICAT asions of time may be available under the provisions of 37 SIX (6) MONTHS from the mailing date of this communicat period for reply specified above is less than thirty (30) day a period for reply is specified above, the maximum statutory are to reply within the set or extended period for reply will, be reply received by the Office later than three months after the patent term adjustment. See 37 CFR 1.704(b).	"ION. CFR 1.136(a). In no event, how tion. s, a reply within the statutory miy period will apply and will expire y statute, cause the application	rever, may a reply be tim nimum of thirty (30) day s SIX (6) MONTHS from to become ABANDONE	nely filed s will be considered timel the mailing date of this o D (35 U.S.C. § 133).	y. ommunication.		
Status							
1)⊠	Responsive to communication(s) filed or	29 March 2004.					
-	☐ This action is <b>FINAL</b> . 2b)☐ This action is non-final.						
3)□	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposit	ion of Claims						
5) □ 6) ☑ 7) □ 8) □ <b>Applicat</b> i	Claim(s) 1-10 is/are pending in the application (s) 1-10 is/are pending in the application (s) 1-10 is/are allowed.  Claim(s) 1-10 is/are rejected.  Claim(s) 1-10 is/are rejected.  Claim(s) 1-10 is/are objected to.  Claim(s) 1-10 is/are objected to.  Claim(s) 1-10 is/are objected to.  Claim(s) 1-10 is/are objected to by the Extended of the specification is objected to by the Extended of the specification	and/or election require aminer. accepted or b) obto to the drawing(s) be hele	ement. ojected to by the l d in abeyance. Sec	e 37 CFR 1.85(a).	ED 1 121(d)		
11)[	Replacement drawing sheet(s) including the The oath or declaration is objected to by	•	=				
Priority ι	ınder 35 U.S.C. § 119						
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>							
Attachmen	• •	_	_				
2)  Notice 3) Information	ce of References Cited (PTO-892) ce of Draftsperson's Patent Drawing Review (PTO-9 mation Disclosure Statement(s) (PTO-1449 or PTO er No(s)/Mail Date	/SB/08) 5) 📙	Interview Summary Paper No(s)/Mail Di Notice of Informal F Other:		O-152)		

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#### **DETAILED ACTION**

1. This action is in response to the amendment filed March 29, 2004. Claims 1-10 are pending. Applicant's arguments and amendments have been fully considered but are not persuasive to overcome all grounds of rejection. All rejections not reiterated herein are hereby withdrawn. This action is made final.

### Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Mazzara et al for the reasons set forth in the Office action of September 29, 2003.

#### **RESPONSE TO ARGUMENTS:**

In the response of March 29, 2004, Applicants traversed this rejection by stating that the rejection has been rendered moot by the amendment to claim 1. In particular, it is asserted that the claim has been amended to clarify that the serum antibody required by the instant invention is obtained from a subject having the phenotype of interest.

Applicant's assert that Mazzara does not teach or suggest this limitation.

Applicants arguments and amendments have been fully considered but are not persuasive to overcome the present grounds of rejection. The present claims require performing a single step in which one identifies a polypeptide. As written, the claims require that the polypeptide correlates with a phenotype of interest and that the

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polypeptide recognizes and binds to a serum antibody from a subject. Mazzara does in fact teach each of these limitations. The method of Mazzara (see, for example, column 19) includes a step of detecting a polypeptide by reacting the polypeptide with human anti-HIV antiserum. It is thereby a property of the polypeptide detected in the method of Mazzara that this polypeptide would be capable of recognizing and binding to a serum antibody from a patient. It is also considered to be a property of this polypeptide that it is characteristic of a phenotype. The term "phenotype" is very broad and includes any number of parameters. For instance, the phenotype may be that an individual is HIV positive. Accordingly, in the method of Mazzara, the polypeptide is considered to "correlate with a phenotype of interest." It is further noted that the present claims do not require performing a step in which the polypeptide is reacted with serum antibody from a "subject having the phenotype of interest" as is argued by Applicants at page 5 of the response. Rather, the claims require only identifying a polypeptide that correlates with a phenotype of interest wherein the polypeptide binds with "a serum antibody obtained from a subject."

## Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

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Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mazzara, as applied to claims 1-9 above, and further in view of Greenspan, for the reasons set forth in the Office action of September 29, 2003.

### **RESPONSE TO ARGUMENTS:**

In the response of March 29, 2004, Applicants traversed this rejection for the same reasons as those set forth for claims 1-9 above. Accordingly, the response to those arguments set forth in paragraph 2 above apply equally to the present grounds of rejection.

THE FOLLOWING ARE NEW GROUNDS OF REJECTION NECESSITATED BY APPLICANTS AMENDMENTS TO THE CLAIMS:

### Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1-10 are indefinite over the recitation of "polypeptide correlating with a phenotype of interest, wherein the polypeptide specifically recognizes and binds a serum antibody obtained from a subject common to a list of characterized genes" because it is not clear as to whether it is the polypeptide, the antibody or the subject that is "common to a list of characterized genes." Given the structural and functional distinctions between polypeptides, antibodies and subjects and a "list of characterized

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genes", it is unclear as to how a polypeptide, antibody or subject would be "common to a list of characterized genes." Accordingly, it is unclear as to how the recitation of "common to a list of characterized genes" further limits the claimed invention.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carla Myers whose telephone number is (571) 272-0747. The examiner can normally be reached on Monday-Thursday from 6:30 AM-5:00 PM. A message may be left on the examiner's voice mail service. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Benzion, can be reached on (571)-272-0782.

Papers related to this application may be faxed to Group 1634 via the PTO Fax Center using the fax number (703)-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For

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more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Carla Myers June 1, 2004

CARLA J. MYERS
PRIMARY EXAMINER